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Design and performance test of a compressed air operated reciprocating machine (Article)

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Abstract

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Renewable energy is an environmental friendly source of energy around the world and fossil fuel sources are the main polluting factor for global climate change. The fossil fuel reserves decreased day by day which creates environmental hazardous pollutants. Fossil fuel reserved crisis leads the researchers to find out alternative sources of energy which should be alternative solution of fossil fuel energy. In this research air compressed engine which is run by compressed air by modifying a 4-stroke petrol engine (IC engine) into two stroke air compressed piston engine where air compressor acts as a fuel source. The experimental results shows a promising maximum efficiency percentages of 53.42, 35.6, 30.4, 26.67 and 23.60 under 2 to 4.5 bar pressure with maximum load condition. © BEIESP.

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